

# ADDITIONS TO THE FLORA OF NEW MEXICO

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The publication of *A Flora of New Mexico* (Martin and Hutchins 1980, 1981; for brevity cited as M&H from hereon) was a long awaited and welcome event. To have access to geographic ranges and nomenclature updated over the 65 years since the publication of the *Flora of New Mexico* (Wooton & Standley 1915) has been a stimulus to floristic research in the state and has allowed the easy determination of plant species here-to-fore unknown in New Mexico or in portions of the state. Also, since 1975 increased knowledge of the flora of New Mexico has resulted from vegetation studies concerned with the distribution of endangered or threatened plant species, from environmental impact studies, or both. In addition to the 79 records that we present here, at least another 138 are now scattered in the literature and are compiled in the Appendix to aid individuals who wish to identify plants from New Mexico or are interested in floristics of the Southwest. The taxa presented here add 8 genera, 43 species, and 9 subspecific taxa to the NM flora. Those given in the appendix bring the total taxa reported here and not recorded as present in NM by M&H to one family, 25 genera, 144 species, and 28 subspecies or varieties.

The following records are arranged in alphabetic order by family and genus. Those that represent taxa not recorded for the state in M&H are marked by an asterisk before the name of the taxon in this list or in the appendix; most of these are first records as indicated by specimen citations. Others are significant range extensions within the state. Abbreviations for

collectors are: F = Fletcher, K = Knight, S = Spellenberg, W = Worthington. Deposition and date of the first known collection is indicated; later collections by F, K, S, or W can be found at ALBU, NMC, UTEP, or UNM.

#### ARISTOLOCHIACEAE

*ARISTOLOCHIA* \*WRIGHTII Seem. Luna Co.: S 1/2 Florida Mts, 9 Apr 1978, W 2581, 5316, 7046 (COLO, UTEP); *McIntosh*, s.n. (NMC). A species of w TX and n Mex.

#### ASTERACEAE

\**ANTHEROPEAS LANOSUM* (Gray) Rydb. (*Eriophyllum lanosum* Gray). Hidalgo Co.: Peloncillo Mts, Granite Gap, 9 Apr 1982, S 6455 (NMC, NY, UNM, ASU); near Steins, W 10221, 11721.5, near Lordsburg in Pyramid Mts, W 9919. Common spring annual formerly known from se AZ to nw Mex and s CA, in our region most frequent after moist winters.

*ASTER LAEVIS* L. var. \**GUADALUPENSIS* A. Jones. Eddy Co.: Guadalupe Mts in riparian of Big, Black, and Gunsight canyons, 15 Sep 1982, K 2370, 2374 (UNM). Variety previously known only from nw TX.

*MACHAERANTHERA* \**RIPARIUS* (Kunth) A. G. Jones. Known from several collections in Hidalgo Co., NM (NMC, UNM). Jones (1983) follows other authors such as Kearney and Peebles (1960) (who use the name *Aster riparius* Kunth) and has considered this and *A. sonorae* Gray as conspecific. None of these names appear in M&H, but *A. blepharophyllum* does, which is interpreted as a rare form of *M. riparia* by Almut Jones (pers. comm. to S., 26 Feb 1986).

*CHRYSOTHAMNUS PARRYI* (Gray) Greene subsp. \**PARRYI*. Rio Arriba Co.: Toltec Mesa 8 km airline ne of Lagunitas, 13 Oct 1984, F 7912 (ALBU, UNM). This subspecies was previously known to range from WY to NV, UT, CO.

*CIRSIUM* \**SCOPULORUM* (Greene) Cockll. Taos Co.: Sangre de Cristo Mts, above E. Fork Santa Barbara Cr., 6 Aug 1985, F 8414 (ALBU, NMC). Extension from the alpine of s CO.

*CONYZA* \**RAMOSISSIMA* Cronq. Doña Ana Co.: Las Cruces, 4 Oct 1985, *McIntosh* 1824 (NMC). Common weed in e US; established in Las Cruces in lawn and cracks of sidewalk.

*ERIGERON* \**BIGELOVII* Gray. Hidalgo Co.: Sierra Rica, 13 May 1980, S & Ward 5524 (NMC, NY). Otero Co.: Sacramento Mts., *Soreng* 2808 (NMC). M&H map as potential for se NM; previous United States records apparently from TX near El Paso. Nesom (pers. comm.) says species is frequent in CHIH.

ERIGERON \*SCOPULINUS Nesom & Roth. Sierra Co.: Black Range, ca 3 km W of James Brothers Cabin, T11S, R10W, S28, 24 May 1981, *Todsen 810524-01* (NMC). Catron Co.: Mogollon Mts, *K 1759*. Socorro Co.: San Mateo Mts, *K & F 1781*, etc.). Previously known only from se AZ.

ERIGERON \*URSINUS D.C. Eaton. Rio Arriba—Mora cos line: Sangre de Cristo Mts, vicinity Santa Barbara Peak, 6 Aug 1985, *F 8384* (ALBU, NMC). Extension from the alpine of S CO; only ca 6 plants observed.

\*FILAGO CALIFORNICA Nutt. Hidalgo Co.: U.S. Hwy. 80, Peloncillo Mts, 20 Apr 1973, *S 3039* (NMC, NY); Pyramid Mts, *W 9908*. Grant Co.: Little Hatchet Mts, *W 8195B*. Luna Co.: Tres Hermanas Mts, *W 10371*. Spring annual formerly known from se AZ to s CA and nw Mex. The species may occur in collections under the names *Stylocline micropoides* Gray or *Evax multicaulis* DC., both reported for the region, all three of similar appearance, and for the casual collector, at least, difficult to distinguish.

HYMENOPAPPUS FILIFOLIUS Hook. var. \*PAUCIFLORUS (I. M. Johnston) B. L. Turner. San Juan Co.: ca 10 km ssw of Waterflow in sand, 31 May 1985, *S 8199* (NMC, TEX). Confirms presence for NM; said by M&H to be expected in nw corner.

MALACOTHRIX \*SONORAE Davis & Raven. Grant Co.: Little Hatchet Mts, 24 Apr 1982, *W 8157* (UTEP). Luna Co.: Tres Hermanas Mts, *W 9545*. Catron Co.: ca 9 km se of Glenwood, Sheridan Gulch Trail, *Soreng & Ward 2130b* (NMC). Known previously from s AZ and n SON.

\*PRENANTHELLA EXIGUA (Gray) Rydb. Hidalgo Co.: Pyramid Mts, 7 Apr 1984, *W 11739* (UTEP). Mostly a species from the Sonoran Desert, but type collection is from near El Paso, TX. Postulated distribution by M&H for se NM counties unlikely.

PRIONOPSIS CILIATA Nutt. San Juan Co.: 21 km w of Farmington, US Hwy 550, 16 Sep 1984, *S 7875* (NMC, NY). Doña Ana Co.: Las Cruces (*S* in 1985, visual w/o specimen). Eddy Co.: Carlsbad, *S 8259*. A plains species recorded by M&H from Otero Co.

SENECIO \*CANUS Hook. Harding Co.: 26 km ne of Roy, 2 Jul 1981, *S et al. 6053; S 7203* (NMC, KSC), a record ca 150 km se of nearest known populations. Diminutive, monocephalic form on caliche, with *Parthenium alpinum*. Other collections from n CO and central UT resemble this phase but none are as dwarfed (specimens examined at BYU, CSU, ID, UNM, UT, UTC, WS).

SENECIO \*DIMORPHOPHYLLUS Greene var. DIMORPHOPHYLLUS. Taos Co.: Wheeler Peak Cirque, 5 Aug 1980, *F 4690* (ALBU, UNM). Previously known from high mts of CO and WY.

SENECIO \*SOLDANELLA Gray. Taos Co.: Red Dome e of Wheeler Peak,

5 Aug 1980, *F* 4659 (ALBU). Previously known from high mts of CO.

\**SILYBUM MARIANUM* (L.) Gaertn. Doña Ana Co.: NM Hwy 404 11 km e of Interstate 25, roadside, 8 May 1985, *S* 8155 (NMC, UTEP). A widespread weed introduced here in straw used to stabilize roadside. Confirms presence for New Mexico; said to be expected in northern tier of counties by M&H.

*THELESPERMA SIMPLICIFOLIUM* Gray. San Miguel Co.: Rowe Mesa s of Pecos, 22 Aug 1985, *F* 8443 (ALBU). A N range extension of ca 200 km from Chaves Co.

### BORAGINACEAE

*CRYPTANTHA* \**BARBIGERA* (Gray) Greene. Luna Co.: Florida Mts, 4 Apr 1980, *W* 5709 (UTEP). Common to the w, reported as far e as w TX (Correll & Johnston 1970), and said to be expected in s NM by M&H. Numerous collections by *W* (UTEP, etc.) from Doña Ana, Grant, Hidalgo, Luna cos. confirm its presence.

*PECTOCARYA* \**HETEROCARPA* (I. M. Johnst.) I. M. Johnst. Luna Co.: Victorio Mts, 23 Apr 1983, *W* 9995 (NMC, UCR, UNM, UTEP). Indicated by M&H to be expected in three sw counties of NM; easternmost record in w TX (Correll & Johnston 1970). Recent records of this, *P. platycarpa* (Munz & I.M. Johnst.) Munz & I.M. Johnst., and *P. recurvata* I. M. Johnston well e of previously known ranges may be due to spread of bristly fruits by livestock. However, a number of spring annuals, common to the w, have been found in this region during the past two decades. Increased botanical activity may be one explanation, their comparatively introduction from the w another, and their spread from small sites of suitable microhabitat after degradation of arid grassland and increase of desert scrub (Van Devender 1980, York & Dick-Peddle 1969) yet a third. The region was inadequately botanized earlier to give strong support to any one explanation.

### BRASSICACEAE

*CHORISPORA TENELLA* (Pall.) DC. Doña Ana Co.: Las Cruces, 4 Apr 1981, *Leyendecker s.n.* (ASU, NMC, NMCR, NY, TEX, UNM). Reported by Marley & Wagner (1981) and mapped by M&H 300 km to n; also in w TX near NM border (Lipscomb 1984). Apparently rapidly spreading and to be expected throughout NM.

*DIPLLOTAXIS* \**TENUIFOLIA* (L.) DC. Otero Co.: US Hwy 82, 8 km e of US Hwy 70, 15 Aug 1972, *Jackson* 295 (NMC). Collections by *W* and students (UTEP) from the same general vicinity, and sightings of the

species in Doña Ana Co. and in El Paso, TX, indicate this Old World weed to be well established and spreading.

*LEPIDIUM* \**CAMPESTRE* (L.) R. Br. Sierra Co.: n end of Black Range e of Beaverhead, 2 Jun 1982, *F & K 6124* (ALBU, UNM). Confirms presence for NM; said by M&H to be expected in n.

*LEPIDIUM* \**LATIFOLIUM* L. Doña Ana Co.: near TX border, 8 Jun 1976, *Alpers 19* (NMC, GH). Guadalupe Co.: 5 km n of Pastura, *S et al. 5984*. European weed now widespread in N. Amer., said M&H to be expected in central NM.

*LEPIDIUM* \**RAMOSISSIMUM* A. Nels. Santa Fe Co.: nw portion of co. in Guaje Canyon, 1 Jun 1984, *S 7766* (NMC). Confirms presence for NM; said to be expected by M&H.

*STREPTANTHUS* \**SPARSIFLORUS* Rollins. Eddy Co.: Guadalupe Mts, Black River Canyon, 17 May 1979, *F 3827* (UNM); others in general vicinity *F 3807*, *K 1966*. An endemic of the Guadalupe Mts, previously known only in TX.

*THYSANOCARPUS* *AMPLECTENS* Greene. M&H write that this occurs in sw NM, but map it "to be expected." Rollins (pers. comm. to W) says that the type locality is in that portion of the state, and that the name is a synonym of *Thysanocarpus curvipes* Hook. var. *elegans* (E & M.) Robins. Records at NMC, UNM, and UTEP, and probably elsewhere, indicate it to be fairly common there.

#### CAMPANULACEAE

*TRIODANIS* \**BIFLORA* (Ruiz & Pavon) Greene. Grant Co.: 11 km nnw of Buckhorn, base of Mogollon Mts, 22 May 1983, *Soreng & Ward 2143a* (NMC). A species of the s U.S. from CA to VA, s to MEX and S.A. Inter-mixed with *T. perfoliata* (L.) Nieuwl. at this site.

#### CARYOPHYLLACEAE

*CERASTIUM* \**AXILLARE* Correll. Otero Co.: ca 3 km nw of Orogrande at s end of Jarillo Mts, 12 Apr 1985, *McIntosh 1665* (NMC). Previously known from w TX and n CHIH.

*STELLARIA* \**WEBERI* Boiv. Taos Co.: Latir Peaks, 1 Aug 1979, *F 4028* (ALBU, UNM). S extension of taxon from CO. Considered a dwarf alpine form of *S. umbellata* Turcz. (Weber 1976), the latter known from several localities in NM.

#### CHENOPODIACEAE

*ATRIPLEX* \**PLEIANTHA* W. A. Weber. San Juan Co.: Navajo Mine, Fruitland, 5 June 1979, *Pace et al. 2388* (RM); collected in same area with-

out knowledge of previous record in 1983, 1984, *S* 7087, 7091, 7795. Sporadic on Fruitland Clay knolls; common at 7091 in 1983, where co-occurring with two other state records, *Phacelia demissa*, *Mentzelia thompsoni* (Soreng 1984a), but absent at this site in the drier spring of 1984. Previously known only from one site in extreme sw CO (Ecology Consultants 1978), but now also known in se UT.

#### CUCURBITACEAE

*CITRULLUS VULGARIS* Schrad. var. *\*CITROIDES* Bailey. Eddy Co.: ca 42 km airline ese of Carlsbad on large, active dunes at Los Medanos, 21 Jul 1978, *K* 394 (UNM); *K* 786 (UNM). About 30–40 plants were found over an area of ca 20 km near an abandoned dwelling. Collections from two consecutive years indicates that population is at least weakly persistent.

*IBERVILLEA \*TRIPARTITA* (Naud.) Greene. Eddy Co.: ca 45 km airline ese of Carlsbad in Los Medanos dunes, 29 Apr 1983, *K* 2467 (UNM). A species common in the Trans-Pecos region of TX.

#### CYPERACEAE

*CAREX PITYOPHILA* Mackenz. Cibola Co.: ca 40 km ssw of Grants at s end of Grants Malpais, 19 May 1979, *S & Repass* 5131 (NMC, NY); Zuni Mts, *F* 6210 (ALBU). M&H map this for Rio Arriba Co., ca 100 km to ne. Hermann (1970) indicates this species to be rare and local in s CO and n NM.

#### EUPHORBIACEAE

*EUPHORBIA \*ERIANTHA* Benth. Eddy Co.: Guadalupe Mts, Big Canyon, infrequent in riparian, 16 Sep 1982, *K* 2400 (UNM). A weedy species common in much of s U.S.

*EUPHORBIA GEYERI* Engelm. var. *\*WHEELERIANA* Warnock & M. C. Johnston. Doña Ana Co.: near boundary monument 4 on Mexican border, 25 Jul 1984, *McIntosh* 1588 (NMC). Formerly known only from dunes of extreme w TX, where it is said to be rare and local (Correll & Johnston 1970). It has also been found very near the NM border at Anthony, TX (UCR, UTEP).

#### FABACEAE

*ACACIA ANGUSTISSIMA* (P. Miller) Kuntze var. *\*SUFFRUTESCENS* (Rose) Isely. Hidalgo Co.: Peloncillo Mts, Guadalupe Pass, T34S, R21W, s edge S16, 15 Aug 1979, *S & Repass* 5301 (NMC). Isely (1973) shows this variety to be widespread in s AZ. Variety *texensis* (T. & G.) Isely is common in sw NM.

**ACACIA \*MILLEFOLIA** S. Wats. **Hidalgo Co.:** very near MEX and AZ borders in Guadalupe Canyon and tributaries, 17 Aug 1979, *S & Repass 5371* (NMC, NY). Isely (1973) indicates this species to occur in extreme se AZ, virtually on the NM border. Observed several times within 1 km of AZ border by S.

**ASTRAGALUS \*DESPERATUS** Jones var. **DESPERATUS.** **San Juan Co.:** near AZ border, 3.5 km airline s of Hwy 504 near Beclabito, 27 Apr 1983, *K 2446* (UNM); 14 km airline n of "The Thumb," *K 2448*. Members of the section *Desperati* are common in se UT and ne AZ, but uncommon in NM.

**ASTRAGALUS FEENSIS** M. E. Jones. **Hidalgo Co.:** low pass s of Pyramid Mts e of Animas, 1 Jun 1985, *Barneby 17985* (NMC). A 370 km range extension to sw for a species previously known only as an endemic of central NM.

**ASTRAGALUS FUCATUS** Barneby. **Socorro Co.:** 22 km n of Magdalena, 8 May 1977, *S 4653* (NMC). A single plant in heavily grazed grassland, sandy soil, ca 200 km to se of localities in San Juan Co. in M&H and Barneby (1964).

**DALEA PURPUREA** Vent. var. **PURPUREA** (= *Petalostemum purpureum* [Vent.] Rydb). **Grant Co.:** 3.2 km s of Silver City on Hwy 90, 26 Apr 1983, *W 10777* (NMC, UTEP). A plains species mapped as far sw in NM as the central counties by M&H; this a range extension of 250 km to the sw, where probably introduced.

**LATHYRUS \*LATIFOLIUS** L. **Otero Co.:** Cloudcroft, 19 Oct 1969, *Smart 84* (UTEP); Haynes Canyon, *Gonzalez 44*. **Lincoln Co.:** 3 km nw Ruidoso, *Berry 19*. **Sierra Co.:** Kingston, *W 13302*. This is a common escape from cultivation and is used in roadside stabilization in many parts of the w U.S.

**PROSOPIS GLANDULOSA** Torr. var. **GLANDULOSA.** **Doña Ana Co.:** 5 km e of Akela on I-10, 16 Apr 1984, *S & Leiva 7797* (NMC). Along freeway right-of-way where it receives somewhat more water than the sympatric var. *torreyana* (L. Benson) M. C. Johnston. M&H map the variety as far w as Lincoln and Eddy cos. in NM, and Johnston (1962) does not indicate it to occur in NM at all. It is a common ornamental in Las Cruces, a possible source of seed for plants along the highway.

**\*SCHRANKIA UNCINATA** Willd. **Hidalgo Co.:** along I-10 at Lordsburg, 5 Apr 1983, *W 10688* (UTEP); Peloncillo Mts, Granite Gap, *W 10703*. **Grant Co.:** 3.2 km s Silver City, *W 10779*. Known from much of central U.S., probably introduced in sw NM through hay to control roadside erosion.

**VICIA \*VILLOSA** Roth. **Doña Ana Co.:** College Farm (in Mesilla Park), both 16 Apr 1895, *Sweet s.n.* and *Peacock s.n.* (NMC). M&H indicate in a footnote that species "probably occurs near cultivated areas" in the state.

Apparently has not been seen in NM since these two simultaneous early records, probably collected by students of Wooton.

#### HALORAGACEAE

*MYRIOPHYLLUM* \**PINNATUM* (Walt.) B.S.P. **Harding Co.:** 1 km ne Abbott Lake, 1 Jul 1981, *F & S* 5339 (UNM). A species widespread to the east.

#### LAMIACEAE

\**CALAMINTHA* *ARKANSANA* (Nutt.) Shinners. **Otero Co.:** Sacramento Mts, T15S, R13E, S22, 1 Aug 1971, *Todsen s.n.* (NMC); e of Cloudcroft, T15S, R13E, S33, 7 Oct 1978, *F s.n.* (ALBU). Nearest known localities are apparently in central TX.

*HEDEOMA* \**DENTATUM* Torr. **Hidalgo Co.:** Peloncillo Mts, Skeleton Canyon, 6 Sep 1981, *S* 6287-B (NMC, NY); 15 air km ssw of Animas, *W* 13395. Irving (1980) shows this species to approach NM only a few km to the w in se AZ.

*MONARDA* *CITRIODORA* Cerv. var. *CITRIODORA*. **Hidalgo Co.:** Peloncillo Mts, Granite Gap, Hwy 180, 6 Jun 1983, *W* 10705 (NMC, UTEP). A species of s-c U.S. reaching se NM (Scora 1967), possibly introduced in sw NM through hay used in control of roadside erosion.

#### LILIACEAE

*ALLIUM* \**ACUMINATUM* Hook. **San Juan Co.:** above e side of Navajo Lake adjacent to sandstone rimrock, T30N, R8W, S25, 2 May 1984, *K* 3031 (UNM). **Hidalgo Co.:** 10 km ne of Virden, *S* 8408. A species widespread to the n and w.

*ALLIUM* *GOODINGII* M. Ownbey. **Lincoln Co.:** Sierra Blanca, 7 Jul 1977, *K* 148 (UNM) with subsequent independent collections by each of us since then. Known for a number of years in c AZ, and for about a decade in w-c NM. Extension ca 240 km se of closest populations, where it is sporadic in moist areas in spruce/fir forest on ne slope of the mountain. This population has passed as *A. brevistylum* Wats. in M&H.

\**ASPHODELUS* *FISTULOSUS* L. **Luna Co.:** 34 km w of Deming on I-10, 19 Apr 1981, *S* 5975 (NMC, NY, TEX); *W* 10783, 11848. A Mediterranean plant common as a weed along roadsides in nc Mex. Also introduced in s CA (Munz 1968).

#### LINACEAE

*LINUM* *LEWISII* Pursh. This perennial is widespread in the west. In the sw corner of NM there are annual plants with styles about 3 mm long or



less, shorter than or equal to the anthers. These plants do not have the erose or ciliate inner sepals characteristic of *L. angustifolium* Huds. or *L. usitatis-simum* L. They will "key" to *L. pratense* (Nort.) Small in Correll & Johnston (1970) and in M&H, and match the description of this species rather well. *Linum pratense* is recorded in M&H only from extreme e-c NM. Observations in Hidalgo Co., near Cloverdale, by Spellenberg indicate that populations are entirely annual and short-styled. To the north, near Virden, perennials and plants blooming their first year grow together; less than 10% are short-styled. These populations of short-styled annuals may be arid grassland ecotypes derived from adjacent perennial *L. lewisii*, and probably do not represent *L. pratense* of the Great Plains. Records are: *Hershey 141*, *S 3070*, *Hess & Sticky 3446*, NMC, all from Hidalgo Co., and *Metcalfe 1580*, NMC from Sierra Co. The phase also barely enters AZ in se Cochise Co. w of Guadalupe Cyn. (*F 3187*, ALBU).

#### MALVACEAE

**ABUTILON** \*SONORAE Gray. Hidalgo Co.: Peloncillo Mts, Skeleton Cyn., 6 Sep 1981, *S 6294* (NMC). Luna Co.: s end Florida Mts., *McKintosh s.n.* (NMC). Formerly known from w TX, n MEX, se AZ.

\***ALTHAEA ROSEA** (L.) Cav. Doña Ana Co.: Las Cruces, Del Rio Drainage Canal, 20 Sep 1984, *Green s.n.* (NMC). Lincoln Co.: Ruidoso, *Berry s.n.* (UTEP). Sparingly established at both sites; young plants apparent.

#### NYCTAGINACEAE

**BOERHAVIA SPICATA** Choisy. Many of the collections of spicate *Boerhavia* from sandy areas in NM will key to *B. spicata* in Kearney & Peebles (1960) or in Standley (1918). These are comparatively robust plants with densely-flowered racemes, ovate floral bracts that are as long as or longer than the ovary at anthesis, and that have stems that are viscid-pubescent below the inflorescence. They will key to *B. torreyana* (Wats.) Standl. in M&H, a common form with narrower, shorter bracts, and usually with less densely pubescent stems. The extremes of this form are on the rockier sites. If the two forms are kept as separate species, then *B. spicata* occurs in NM; if not, then all forms are included in *B. spicata*, the older name, a taxonomy followed by C. E. Reed in Correll & Johnston (1970).

#### ONAGRACEAE

**CALYLOPHUS** \*BERLANDIERI Spach. subsp. PINIFOLIUS (Engelm. ex Gray) Towner. Socorro Co.: 13 km s of San Antonio along I-25, 24 May 1983, *S 7017* (NMC, MO). San Juan Co.: Little Water, road shoulder, *S*

8492. About 160 km to w of known range of species in NM (subsp. *berlandieri*) and a state record for the subspecies, a native of central Oklahoma and Texas (Towner 1977). It may have been introduced in hay spread on road banks and shoulders. Species not in M&H.

*CALYLOPHUS SERRULATUS* (Nutt.) Raven. **Hidalgo Co.:** Peloncillo Mts, Granite Gap, Hwy 80, 5 Apr 1983, W 10708 (NMC, UTEP). Mapped mostly e of mountains in NM by M&H, and shown to "skip" to e AZ in Towner (1977). Possibly introduced in hay to control roadside erosion.

#### OROBANCHACEAE

*OROBANCHE LUDOVICIANA* Nutt. var. *\*ARENOSA* (Suksd.) Cronq. **San Juan Co.:** ca 6 km n of La Plata, 11 Aug 1981, S 6119 (NMC). Confirms presence for state; said to be expected by M&H (as *O. multiflora*).

#### OXALIDACEAE

*OXALIS \*PILOSA* Nutt. **Hidalgo Co.:** Peloncillo Mts, Guadalupe Cyn, T34S, R21W, S6, 7 Apr 1979, S 5072. Infrequent; a species of AZ, CA, and SON.

#### POLEMONIACEAE

*IPOMOPSIS CONGESTA* (Hook.) V. Grant. **Sandoval Co.:** 35 km nw of San Ysidro, 4 Apr 1984, S 7789 (NMC, ID, NY, CSU, ASU, UNM). Dominant on clay road bank, about a 100 km se range extension from San Juan Co.

*PHLOX \*VARIABILIS* Brand. **Taos Co.:** Little Costilla Peak, 29 Jul 1982, F 6396 (ALBU, NMC). Previously known from the high mts of CO and UT.

#### POLYGONACEAE

*ERIOGONUM \*FLEXUM* M. E. Jones. **San Juan Co.:** 10.5 km s of Waterflow, Navajo Mine, 5 Jun 1985, S 8222 (NMC, NY, RSA, UNM). Rare on steep, n-facing clay slope. Reveal and Ertter (1976) map this species (in *Stenogonum*) very near to the border of NM in sw CO.

*OXYRIA DIGYNA* (L.) Hill. **Otero Co.:** Sierra Blanca, cliff face at 3350 m elev, 16 Aug 1980, W 6355 (COLO, UTEP). M&H indicate this occurs in NM only in high mountains of northern counties; this a range extension of ca 400 km to south.

#### RANUNCULACEAE

*DELPHINIUM \*AJACIS* L. **Eddy Co.:** ca 30 km e of Carlsbad, roadside

below Maroon Cliffs, 14 May 1979, K 878 (UNM). A garden escape, native of Europe, found occasionally in several states in U.S.

*RANUNCULUS* \**ABORTIVUS* L. var. *ABORTIVUS*. Taos Co.: Rio Santa Barbara 5 km airline se of Peñasco, 4 Jul 1982, F 6252 (ALBU, UNM). A transcontinental species.

#### ROSACEAE

*POTENTILLA CONCIINNA* Rich. in Frankl. var. \**RUBRIPES* (Rydb.) C. L. Hitchc. Taos Co.: Latir Peaks, 1 Aug 1979, F 4062 (ALBU, UNM). An alpine variety widely distributed in w N. Amer.

*RUBUS* \**PRO CERUS* P. J. Muell. Sierra Co.: Kingston, along N. Percha Creek, 23 Aug 1980, W 6392 (UTEP). Catron Co.: Glenwood, weed along road and in creek, S 7742. Doña Ana Co.: Organ Mts, Haynor Resort (S visual, w/o record). A blackberry adventive in AZ (Kearney and Peebles 1960) and a well established and unwelcome weed in the Pacific States.

#### SCROPHULARIACEAE

*CORDYLANTHUS* \**LAXIFLORUS* Gray. Grant Co.: 5 km n of Redrock, single plant in heavily grazed area, 7 Sept 1985, S 8286 (NMC, NY, UC). Species previously known only from AZ.

*LINARIA VULGARIS* Mill. Lincoln Co.: s of Nogal along Hwy 37, 25 Aug 1984, Soreng 2601 (NMC). An aggressive Eurasian weed 200 km s of the two NM counties where mapped by M&H. Found throughout much of the U.S.; to be expected in much of NM.

*PENSTEMON BRIDGESII* Gray. San Juan Co.: 6.4 km n of La Plata, 11 Aug 1981, S 6126 (NMC, NY). Kearney and Peebles (1960) indicate this species to occur from sw CO across much of n AZ. It was known from NM only from one old record in extreme w Catron Co. nearly 300 km to the south.

#### SOLANACEAE

*SOLANUM AMERICANUM* Mill. Hidalgo Co.: Peloncillo Mts, Guadalupe Cyn, 14 Aug 1979, S & Repass 5276 (NMC, NY). Doña Ana Co.: Organ Mts, W 6594. These records extend the known range ca 300 km to s from central NM and central Arizona.

*SOLANUM* \**CAROLINENSE* L. Mora Co.: 29 km w of Roy, 3 July 1981, Ward et al. 81-269 (NMC, NY). M&H indicate the species is to be expected in the extreme se counties.

#### TYPHACEAE

*TYPHA* \**DOMINGENSIS* Pers. San Juan Co.: Navajo Coal Mine, ca 5 km

s of Fruitland, 8 Sep 1983, *S & Ward* 7585 (NMC), where it grew with *T. latifolia* L. Correll & Correll (1972) indicate the species to occur across the U.S., but M&H do not include the name.

#### ULMACEAE

*CELTIS* \**OCCIDENTALIS* L. **Harding Co.:** along the Canadian River 11 km airline w of Mills, 3 Jul 1981, *F & K* 5353 (UNM). A western extension from TX & OK, possibly escaped from cultivation.

#### VIOLACEAE

*VIOLA* \**VIAVARUM* Pollard. **Eddy Co.:** 46–59 km sw of Whites City in Guadalupe Mts, shaded, moist crevices of limestone in Big, Black, and Gunsight canyons, 27 Mar 1982, *K* 1822, 1823 (UNM). A w range extension of ca 800 km from OK. The plants from this region have been previously misidentified as *V. missouriensis*; R. Barneby kindly identified Knight's material. The Guadalupe Mts presently harbor several relict species of the southeastern hardwood forest, and this violet may have been part of a more inclusive flora of such affinity. Plants are consistently different from those of more eastern populations, and study may show them to be taxonomically distinct.

#### APPENDIX

Additional records and literature citation for distribution records of plant taxa reported for New Mexico. This list serves to up-date Martin & Hutchins (1980, 1981) but does not repeat range extensions or new species mapped in Fletcher, et al., 1984. For taxa new to the state or otherwise not included in Martin & Hutchins (1980, 1981) an asterisk appears next to the name of the taxon added to the flora.

ACANTHACEAE: *Carlourightia* \**texana*; \**Justicia wrightii*; \**Tetramerium nervosum*;—Daniel 1984. APIACEAE: *Lomatium* \**nevadense* var. *parishii*—Mathias & Constance 1945; *Perideridia* \**parishii* subsp. *parishii*—Chuang & Constance 1969. *Pteryxia* \**bendersonii*—Mathias & Constance 1945. APOCYNACEAE: *Amsonia* \**fugatei*—McLaughlin 1985. ASCLEPIADACEAE: \**Cynanchium arizonicum*—Todsén 1984. ASTERACEAE: *Chaetopappa* \**elegans*—Soreng & Spellenberg 1984; \**C. hersheyi*—Shinners 1946. *Chrysothamnus nauseosus* subsp. \**arenarius*, *C. n.* subsp. \**nitidus*—Anderson 1978; *C. n.* ssp. \**texensis*—Anderson 1980; *Erigeron compactus* var. \**consimilis*—Marley & Wagner 1981; *E.* \**eximius*—Nesom 1978; *E.* \**rybius*—Nesom 1982; *Evax* \**prolifera*—Spellenberg 1984; *Helianthus* \**paradoxus*—Seiler, et al. 1981; *Lygodesmia* \**arizonica*—Tomb 1980; *Parthenium* \**alpinum* var. *alpinus*—Spellenberg 1984; *Pevityle* \**lemmoni* (Gray) MacBride—Todsén 1973; *P. staurophylla* var. \**homoflora*—Todsén 1983; *Tetradymia* \**spinosa*—Marley & Wagner 1981. BORAGINACEAE: *Cryptantha* \**bakeri*; *C.* \**gracilis*; *C.* \**recurvata*; *C.* \**setosissima*—Sivinski in press. BRASSICACEAE: \**Alyssum minus* var. *micranthum*—Hartman et al. 1980; \**Diplotaxis muralis*—Marley & Wagner 1981; *Lepidium oblongum*—Wagner 1983; *Malcomia* \**africana*—Marley & Wagner 1981; *Tbelypodopsis* \**purpusii*—Ward & Spellenberg 1981. \*BROMELIACEAE: *Tillandsia*

*recurvata*—Wagner 1979. CACTACEAE: *Echinocereus enneacanthus* var. \**enneacanthus*. *Opuntia* \**ficus-indica*—Benson 1982. CAMPANULACEAE: \**Nemacladus glanduliferus* var. *orientalis*—Ward & Spellenberg 1981. CAPPARACEAE: *Polanisia* \**jamesii*—Willson et al. 1979. CARYOPHYLLACEAE: *Arenaria* \**stricta* subsp. *texana*—Wagner 1983; *Stellaria* \**nitens*—Soreng & Spellenberg 1981. CHENOPODIACEAE: \**Grayia brandegei*—Levin 1985. *Suaeda suffrutescens* var. \**detonsa*—Hopkins & Blackwell 1977. COMMELINACEAE: *Tradescantia* \**wrightii*—Spellenberg 1979. CONVULVULACEAE: *Ipomoea* \**egregia*—Soreng & Spellenberg 1981. CROSSOSOMATAACEAE: \**Apacheria chiricabuenensis*—Knight et al. 1984; *Glossopetalon* \**plantierum*—Brooks 1984. CUPRESSACEAE: *Juniperus* \**erythrocarpa*—Adams & Zannoni 1979. CYPERACEAE: *Cyperus* \**ovularis* var. *cylindricus*—Kessler 1984. EUPHORBIACEAE: *Phyllanthus* \**abnormis* var. *abnormis*—Urbatsch et al. 1975. FABACEAE: *Astragalus cobrensis* var. \**maguirei*—Isely 1984; *A.* \**monumentalis*—Marley & Wagner 1981; *A.* *punicus* cf. var. \**punicus*; *A.* \**sericoleucus*—Spellenberg 1984; *Dalea* \**cylindriceps*—Barneby 1977; \**Tephrosia tenella*—Todsén 1984. HYDROPHYLLACEAE: *Nama hispidum* var. \**mentzelii*, *N.* \**retrosum*, *N.* \**stevensii*—Bacon 1984; *Phacelia* \**bakeri*—Atwood 1975; *P.* \**demissa*—Soreng 1984a; *P.* *integrifolia* var. \**texana*—Atwood 1975; *P.* \**splendens*—Knight 1984. LAMIACEAE: *Hedeoma* \**reverbtonii* var. *serpyllifolium*; *H.* \**todesnii*—Irving 1980; *Monarda punctata* var. \**occidentalis* (replacing var. *lasiodonta*, mis-mapped for NM in M&H)—Scora 1967; *Salvia* \**microphylla* var. *wislizenii*—Marley & Wagner 1981; *S.* \**summa*—Worthington 1982. LOASACEAE: *Mentzelia* \**thompsonii*—Soreng 1984a. LYTHRACEAE: \**Nesaea longipes*—Graham 1977. MALPIGHIACEAE: *Aspicarpa* \**hirtella*—Todsén 1982. MALVACEAE: *Sphaeralcea* \**polychroma*—La Duke 1985. MARTYNIACEAE: *Proboscidea* \**sabulosa*—Bretting 1982. OPHIOGLOSSACEAE: *Botrychium* \**matricariifolium*—Spellenberg 1978. POACEAE: *Agrostis* \**variabilis*; *Alopecurus* \**pratensis*; *Apera* \**interrupta*; *Aristida* \**brounii*; *Bothriochloa* \**bladonii*, *B.* \**ischaemum* var. *songarica*; \**Brachiaria ciliatissima*, *B.* \**texana*; *Bromus* \**diandrus*, *B.* \**mollis*; *Chloris* \**submutica*; *Dichanthelium* \**linearifolium*; *Echinochloa* \**crus-gavonis*, *E.* *muricata* var. \**microstachys*, *E. n.* var. \**muricata*; *Elymus* \**saunderii*; *Elytrigia* \**pontica*; *Eragrostis* \**lutescens*, *E.* \**palmeri*, *E.* \**superba*; *Eremopyrum* \**triticeum*; *Festuca* \**arundinacea*, *F. ovina* var. \**rydbergii*; *Hilaria* \**rigida*; *Leymus* \**ambiguus*, *L.* \**salinus*; *Muhlenbergia* \**villosa*; *Panicum* \**antidotale*, *P.* \**coloratum*, *P.* \**billmanii*, *P.* \**stramineum*; *Paspalum* \**setaceum* var. *setaceum*; *Pennisetum* \**ciliare*; *Poa* \**arachnifera*, *P.* \**bulbosa*, *P. fendleriana* var. \**albescens*, *P.* \**trivialis*; \**Psathyrostachys juncea*; \**Rhynchelytrum repens*; \**Sclerochloa dura*; *Setaria* \**leucopila*, *S.* \**ramiseta*; *Sporobolus* \**beterolepis*; \**Urochloa panicoides*—Allred et al. 1986. POLEMONIACEAE: *Ipomopsis longiflora* subsp. \**australis*—Fletcher & Wagner 1984; *I.* \**pinnata*—Soreng 1984b. POLYGALACEAE: *Polygala rimulicola* var. \**mescalatorum*—Wendt & Todsén 1982. POLYGONACEAE: *Eriogonum* \**aliquantum*—Reveal 1976; *E.* \**atrorubens* var. *atrorubens*—Soreng 1984a; *E.* \**gordonii*—Reveal 1976; *E.* \**bookeri*—Soreng 1984a; *E.* \**microthecum*, *E.* \**palmerianum*—Reveal 1976; *E.* \**scabrellum*—Soreng 1984a; *E.* \**schocleyi*; *E.* \**umbellatum*—Reveal 1976. POLYPODIACEAE: *Cheilanthes* \**pringlei*—Wagner 1979. RANUNCULACEAE: *Ranunculus* \**testiculatus*—Marley & Wagner 1981. ROSACEAE: *Cercocarpus* \**intricatus*—Marley & Wagner 1981. RUBIACEAE: *Galium* \**emeryense* subsp. *emeryense*—Wagner 1983. SAXIFRAGACEAE: *Heuchera* \**glomerulata*—Todsén 1982. SCROPHULARIACEAE: \**Mecardonia vandellhoides*—Todsén 1984. Penstemon \**ramosus*—Crosswhite 1966. SOLANACEAE: *Chamaesaracha* \**pallida*—Averett 1973. VERBENACEAE: *Glandularia bipinnatifida* var. \**brevispicata*, *G.* \**chiricabensis*—Umber 1979. VIOLACEAE: *Viola* \**pratensis*—Russell 1965.

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